

### **REMARKS**

Upon entry of the present amendment the claims under consideration remain 1-20. Claims 1, 6, 7, 10, 14, and 15 are amended hereby. Claims 1 and 14 have been amended to more clearly point out and specify the relative positions of the finger surface with respect to the armature bracket and the spring attachment means, and the relationship of the trip actuating surface to the trip finger in the two positions of operation of the trip assembly. Claims 1, 10, and 14 are also amended to change the phrase "spring tab" to -- spring attachment means --. It is believed that the phrase "spring tab" is unnecessarily limiting in that the place of attachment for the spring need not be a "tab" *per se* but might be a bar with a through-hole, etc., as would be readily understood by a person of skill in the art. Claims 6, 7, 15 and 16 have been amended to more clearly state the angled nature of the spring within the trip assembly. The Detailed Action of 18 November 2005 will be addressed below with respect to any headings and paragraph numbers contained therein.

It is first generally noted that the present invention defines physical parts and the arrangement thereof, leading to a functionality whereby the spring is the sole controller of the bias force of the trip assembly, eliminating the need for additional calibration means, as set forth in the specification at page 6, line 12.

#### ***Claim Rejections 35 U.S.C. §103***

Per paragraph 2 of the Detailed Action, claims 1, 2, 6, 7, 10, 12-16, 19, and 20 stand rejected under 35 U.S.C. §103(a) as obvious over Batteux et al. (US 5,831,499, hereinafter "Batteux") in view of Ulerich et al. (US 6,433,290, hereinafter "Ulerich"). It is the contention of the Detailed Action that Batteux et al. teaches all elements of the claimed invention except for a spring tab, which teaching is supplied by Ulerich et al. showing a spring tab in "a circuit breaker and a latch mechanism mounted on a base" as at Fig. 7, 52 (sic 152?). Applicant respectfully traverses.

That portion of the Ulerich apparatus cited by the Detailed Action is not for a trip mechanism as per the presently claimed invention, but is instead for an indicator mechanism, as

shown in Ulerich Figures 4 and 7. Referencing Ulerich, Figure 1, it is noted that the indicator apparatus (IA), 4, is separate from the trip mechanism (TM) 22. While the indicator mechanism 4 interacts with the trip mechanism 22, the separate apparatuses share no interchangeable parts leading to the functionality of the trip mechanism. Thus, there is no suggestion of combinability from the art itself to mix and match the parts of a trip mechanism of Batteux with the indicator apparatus parts of Ulerich in order to achieve the trip mechanism of the present invention. It is therefore respectfully submitted that a *prima facie* case of obviousness has not been made from the art itself, and the present rejections should be withdrawn.

It is further noted that the spring arrangement of Batteux, wherein the spring 36 is used as a pusher spring, does not meet the physical arrangement laid out in the amended and clarified claims 1 and 14 wherein the spring attachment is limited to that end of the movable armature having the trip-actuating surface.

With respect to claim 6, it is believed that the amended claim 1 now clearly defines over the combination of Batteux and Ulerich by further specifying that the spring is inclined to the axis in both the tripped and non-tripped operating states of the trip mechanism.

With respect to claim 7, it is not believed that the claimed angle is obvious, or would have been a "result effective variable" in that the combination of Batteux and Ulerich does not disclose the functional arrangement of parts claimed. Therefore the inclination and the specific angle of the spring in claimed mechanism have not heretofore been recognized as "a result effective variable" within the art itself. Thus, it is urged that the rejection be withdrawn.

With respect to claim 10, it is reiterated that the recited spring tab and stop tab arrangement of Ulerich are with respect to the indicator apparatus and not the trip mechanism, as discussed above with respect to claim 1.

With respect to claim 12, the Examiner states that it is well known in the art to use a plurality of cutouts in a moveable armature to reduce the amount of weight or mass of the trip assembly. It is not believed that any such plurality of cutouts is shown in the cited art. It is further believed that the arrangement of the present invention, when considered as a whole,

makes the claimed cutouts non-obvious due to the different combination of structural features of the present invention over that of the art.

With respect to claim 13, it is again noted that the "tripping mechanism" cited by the Examiner for Ulerich is with reference to the indicator section (column 4, lines 26-35) and the second-spring cited by the Detailed Action is with respect to the latch section (column 5, lines 14-22). As the first and second springs of Ulerich belong to separate mechanisms, only one of which is the tripper mechanism, it is not believed that the suggestion of combinability comes from the art itself and therefore it is urged that the rejection be withdrawn.

With respect to claim 14, it is believed that the amended claim 14, which more closely sets forth the method of assembling the trip assembly as more analogous to the presently amended claim 1, now also more clearly defines over the teachings of Batteux and Ulerich.

With respect to claim 15, the remarks with respect to Claims 5 and 6 are reiterated, and it is urged that Batteux cannot now be properly said to define an angle relative to the vertical axis in the operating positions as claimed in amended claim 14.

Per paragraph 3 of the Detailed Action, claims 8, 9, and 18, stand rejected as obvious over Batteux in view of Ulerich and further in view of Salvati et al. (US 4,074,218, hereinafter "Salvati"). It is the contention of the Detailed Action that while Batteux lacks a constant trip-bar gap, Salvati teaches a mechanism for maintaining a constant air gap. Applicant respectfully traverses noting that Salvati uses a calibration screw caught at the sight of passage of column 5, line 10, whereas the present invention is specifically limited by the limitations of claim 1 and 14 to exclude such calibration screws and other adjustment means.

Per paragraph 4, page 8, of the Detailed Action, claim 11 stands rejected as obvious over Batteux in view of Ulerich and further in view of Dorfman (US 2,050,285, "hereinafter "Dorfman"). Applicant respectfully traverses. After careful review, it is believed that the arrangement of parts shown in Dorfman does not teach or suggest the specifically claimed

arrangement of parts of independent claims 1 or 14, either alone or in combination with Batteux and Ulerich. Further, the mechanism of Dorfman shows an adjustable engagement means for each pole, as set forth at column 3, line 43, which is excluded by the limitations of the present claims.

Per paragraph 5 of the Detailed Action, claims 3, 4, and 17 stand rejected as obvious over Batteux in view of Ulerich and further in view of Heberlin, Jr. et al. (US 3,845,432, hereinafter "Heberlin"). Applicant respectfully traverses. After careful study, Heberlin is not believed to teach or suggest the specifically claimed arrangement of parts in the presently claimed invention, either alone or in combination with Batteux and Ulerich. It is further noted that Heberlin shows a calibrating nut 32 as specifically excluded by the limitation of the present claims.

Per paragraph 6 of the Detailed Action, claim 5 stands rejected as obvious over Batteux in view of Ulerich and Heberlin, Jr. and further in view of Richard (sic, Reichard) et al. (US 6,218,920, hereinafter "Reichard"). Applicant respectfully traverses. Applicant reiterates his remarks above with respect to the lack of teaching or suggestion Batteux, Ulerich or Heberlin, singly or in combination, as to the specifically claimed arrangement of parts in the presently claimed invention. It is further noted that Reichard shows adjusting bar arm 23 and 24 and calibration screw 25, which are specifically excluded by the limitations of the presently claimed invention(s).

### **Conclusion**

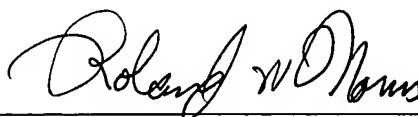
For all the foregoing reasons, it is believed that none of the cited art references cannot singly or in combination, teach the specifically claimed arrangement of the parts and the functionality thereof when the present invention is considered as a whole. Therefore, it is respectfully requested that all claims be considered allowable and a notice to that effect is earnestly solicited.

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Applicant further requests a two month extension of time for response to the Office Action of 18 November 2005. The Petition for Two Month Extension of Time (including fee payment by deposit account) is enclosed with this response.

Favorable consideration is requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Roland W. Norris".

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